

ART 34 AMDT

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CLAIMS

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1. A method of automatically disinfecting or sterilizing at least a portion of any of a resting, a milking, or a feeding station (3; 24; 26) provided with an animal identification device (18) and located in an area (1), in which milking animals are allowed to move, wherein each of said milking animals visiting said any of a resting, a milking, or a feeding station is identified, characterized by the steps of:
 - retrieving (57) information regarding the health of each of said milking animals entering said any of a resting, a milking, or a feeding station; and
 - automatically disinfecting or sterilizing (60) said at least portion of any of a resting, a milking, or a feeding station if said retrieved information reveals that a milking animal entering said any of a resting, a milking, or a feeding station has an infection that is capable of being transmitted to other milking animals, the disinfection or the sterilization being performed after that said infectious milking animal has left said any of a resting, a milking, or a feeding station, wherein
 - no further milking animals are admitted to enter said any of a resting, a milking, or a feeding station until the disinfection or the sterilization has been performed.

2. The method of claim 1 wherein

- said any of a resting, a milking, or a feeding station is connected to a computer (19), which holds a database with information of said milking animals and their health; and
- said step of retrieving information is performed by means of referring to said database.

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3. The method of claim 2 wherein said information regarding the health of said milking animals is entered manually into said database; or is entered automatically from a computer-connected measuring device for measuring a health-related parameter of
5 said milking animals.

4. The method of claim 1 wherein

- a health-related parameter of each of said milking animals is measured (57) by means of a measuring device (47) connected to said any of a resting, a milking, or a feeding station; and

10 - said step of retrieving information is performed by means of referring to said measuring device.

5. The method of any of claims 1-4 wherein said step of automatically disinfecting or sterilizing said at least portion of any of a resting, a milking, or a feeding station is performed (62, 60) irrespective of said information retrieved if the time lapsed since said at least portion of any of a resting, a milking, or a feeding station was last disinfected or sterilized is above a threshold value.
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6. The method of claim 5 comprising:

20 - retrieving (57) information regarding the health of each of said milking animals in said area (1); and

- setting said threshold value depending on the percentage of said milking animals in said area (1) that have an infection capable of being transmitted to other milking animals, where
25 said percentage is deduced from said information retrieved regarding the health of each of said milking animals in said area (1).

7. The method of any of claims 1-5 wherein said step of automatically disinfecting or sterilizing said at least portion of any of a resting, a milking, or a feeding station is performed (52, 60) irrespective of said information retrieved if 5 it is established that no milking animal visits, or is to visit, said any of a resting, a milking, or a feeding station.

8. The method of any of claims 1-7 wherein said step of automatically disinfecting or sterilizing said at least portion of any of a resting, a milking, or a feeding station is 10 performed by means of exposing said at least portion of any of a resting, a milking, or a feeding station to any of heat, radiation, or a chemical.

9. The method of claim 8 wherein said step of automatically disinfecting or sterilizing said at least portion of any of a resting, a milking, or a feeding station comprises the step of 15 flushing said at least portion of any of a resting, a milking, or a feeding station with a hot fluid.

10. The method of claim 8 wherein said step of automatically disinfecting or sterilizing said at least portion of any of a resting, a milking, or a feeding station comprises the step of 20 irradiating said at least portion of any of a resting, a milking, or a feeding station with UV light.

11. The method of any of claims 1-10 wherein said at least portion of any of a resting, a milking, or a feeding station 25 includes surfaces of said any of a resting, a milking, or a feeding station, which an animal visiting said any of a resting, a milking, or a feeding station may contact for a specified purpose or accidentally.

12. The method of any of claims 1-11 wherein

- said any of a resting, a milking, or a feeding station includes a milking station (3); and

- said at least portion thereof includes a respective teat receiving opening of each teat cup (11) of the milking station;

5 a respective teat receiving opening of each teat cleaning cup (21) of the milking station, if any; teat cleaning brushes (22) of the milking station, if any; a front portion of a robot arm (15) of the milking station; and a manger (17) of the milking station.

10 13. The method of any of claims 1-12 wherein

- said any of a resting, a milking, or a feeding station includes a feeding station (24); and

- said at least portion thereof includes surfaces of a manger of the feeding station.

15 14. The method of any of claims 1-13 wherein

- said any of a resting, a milking, or a feeding station includes a resting station (26); and

- said at least portion thereof includes a floor of the resting station.

20 15. The method of any of claims 1-10 wherein

- said any of a resting, a milking, or a feeding station includes each station (3, 24, 26) located in said area that is provided with an animal identification device; and

25 - said at least portion thereof includes all surfaces of each station an animal in said area may contact for a specified purpose or accidentally.

16. A device for automatically disinfecting or sterilizing at least a portion of any of a resting, a milking, or a feeding station (3; 24; 26) provided with an animal identification device (18) and located in an area (1), in which milking animals 5 are allowed to move, wherein each of said milking animals visiting said any of a resting, a milking, or a feeding station is identified, characterized in:

- a processing and control device (19) adapted to retrieve (57) information regarding the health of each of said milking animals 10 entering said any of a resting, a milking, or a feeding station; and
- a disinfecting or sterilizing apparatus (29-34) capable of automatically disinfecting or sterilizing said at least portion of any of a resting, a milking, or a feeding station, said disinfecting or sterilizing apparatus being connected to said processing and control device (19), wherein
- said processing and control device (19) is adapted, provided that said information retrieved reveals that a milking animal entering said any of a resting, a milking, or a feeding station 20 has an infection that is capable of being transmitted to other milking animals, to control said disinfecting or sterilizing apparatus to automatically disinfect or sterilize said at least portion of any of a resting, a milking, or a feeding station after that said infectious milking animal has left said any of a resting, a milking, or a feeding station, and before further 25 milking animals are admitted to enter said any of a resting, a milking, or a feeding station.

17. The device of claim 16 wherein said processing and control device holds a database with information regarding the health of each of said milking animals entering said any of a resting, a 30 milking, or a feeding station.

milking, or a feeding station, which information said processing and control device is adapted to retrieve.

18. The device of claim 17 wherein

- said processing and control device is connected to a measuring device (47) for measuring a health-related parameter of said milking animals, and
- said processing and control device (19) is adapted to retrieve said information regarding the health of each of said milking animals entering said any of a resting, a milking, or a feeding station in the form of said health-related parameter.

19. The device of claim 16 comprising

- a measuring device (47) for measuring a health-related parameter of said milking animals, wherein
- said processing and control device (19) is adapted to retrieve said information regarding the health of each of said milking animals entering said any of a resting, a milking, or a feeding station in the form of said health-related parameter.

20. The device of any of claims 16-19 wherein said processing and control device is adapted to control said disinfecting or sterilizing apparatus to automatically disinfect or sterilize (62, 60) said at least portion of any of a resting, a milking, or a feeding station irrespective of said information retrieved if the time lapsed since disinfection or sterilization was last performed by said apparatus is above a threshold value.

25 21. The device of claim 20 wherein said threshold value is set depending on the percentage of said milking animals in said area (1) that have an infection capable of being transmitted to other milking animals.

22. The device of any of claims 16-21 wherein said processing and control device is adapted to control said disinfecting or sterilizing apparatus to automatically disinfect or sterilize (52, 60) irrespective of said information retrieved if no 5 milking animal visits, or is to visit, said any of a resting, a milking, or a feeding station.

23. The device of any of claims 16-22 wherein said disinfecting or sterilizing apparatus is any of a heat supply apparatus, a chemical supply apparatus, or a radiation exposure apparatus 10 (32-34).

24. The device of claim 23 wherein said disinfecting or sterilizing apparatus is an apparatus for flushing said at least portion of any of a resting, a milking, or a feeding station with a hot fluid (32).

15 25. The device of any of claims 16-24 wherein said at least portion of any of a resting, a milking, or a feeding station includes surfaces of said any of a resting, a milking, or a feeding station, which an animal visiting said any of a resting, a milking, or a feeding station may contact for a specified 20 purpose or accidentally.